PROFESSIONAL TRAINING OF THE MODERN TEACHER IN THE CONDITIONS OF DISTANCE EDUCATION

Oksana Bialyk[1], Vitalii Honcharuk[2]

[1]*Doctor of Pedagogical Sciences, Professor, Professor of the Department of Pedagogy and Educational Management of Uman State Pedagogical University named after Pavlo Tychyna, Uman, Ukraine, e-mail: byalikov@gmail.com, ORCID: http://orcid.org/0000-0001-8200-6358*
[2]*Ph.D. (Pedagogical Sciences), Senior Lecturer at the Department of Chemistry, Ecology and Relevant Teaching Methodologies, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: gvitalii1975@gmail.com, ORCID: https://orcid.org/0000-0002-3977-3612*

Abstract. The article reveals the specifics of the organizationdistance learning as an innovative form of professional training of a modern teacher. It was established that modern distance education is an extensive system of knowledge transfer at a distance using various means and technologies, which helps students obtain the necessary information for use in practical activities, while distance learning is a form of organization of the educational process and pedagogical technology, the basis of which is a controlled independent student work and wide application of modern information and communication technologies in education. Distance learning uses the following concepts: asynchronous / asynchronous modes; web resources of educational disciplines (programs), distance courses; distance learning web environment; distance form of education in higher education institutions. In the conditions of distance learning in higher education institutions, the use of modern technologies is provided, such as: information and communication technologies of distance learning – technologies for creating, storing, storing and accessing distance courses (electronic resources) of educational disciplines (programs), as well as ensuring the organization and support of educational process using specialized software and information and communication tools; psychological and pedagogical technologies of distance learning – a system of means, techniques, steps, the consistent implementation of which ensures the fulfillment of the tasks of education, education and personality development; distance learning technologies – a complex of educational technologies (in particular, psychological-pedagogical and information-communication) that provide an opportunity to implement the distance learning process. It has been established that distance learning can be implemented through the use of a distance form as a separate form of education; the use of distance learning technologies to provide education in various forms: institutional (full-time – day, evening; part-time, distance; online); individual (external; family or home; pedagogical patronage; workplace or production); dual.
Keywords: institution of higher education, distance learning, innovative forms of professional training of modern teachers, distance learning technologies.
JEL Classification: A23, A29, I28
Formulas: 0; fig.: 0; tabl.: 0; bibl.: 6

Introduction. The global process of transition from an industrial to an information society, as well as quarantine conditions and military status in Ukraine, require significant changes in many spheres of state activity. First of all, this concerns the reform of the education system through the creation of a new system of information support for education and Ukraine's entry into the transcontinental computer information system.

The development of the educational system in Ukraine leads to the emergence of new opportunities for:

– updating the content of education and methods of teaching disciplines and spreading knowledge;

– expanding access to all levels of education, realizing the possibility of obtaining it for a large number of young people, including those who cannot study in higher education institutions according to traditional forms due to a lack of financial or physical opportunities, professional employment, distance from large cities, prestigious educational institutions, etc.;

– implementation of the system of continuous education "throughout life", including secondary, pre-university, higher and postgraduate education;

–individualization of education in mass education [5].

Distance education, the introduction of which in Ukraine was foreseen by the National Informatization Program, is being developed at a rapid pace to achieve the specified results.

Literature review. In recent decades, the scientific and methodological foundations of distance learning have been developing rapidly. The works of many foreign scientists – R. Delling, D. Keegan, M. Simonson, M. Moore, A. Clark, M. Thompson, etc. – are devoted to the problems of the development of distance education. and domestic ones – O. Andreev, G. Kozlakova, I. Kozubovska, V. Oliinyk and others. However, this problem needs systematization and generalization.

Aims. The purpose of the article is to find out the specifics of the organization distance learning as an innovative form of professional training of a modern teacher.

Methodology. The basis of the conducted research was the study of scientific works and practical studies on the issues of distance education. The methodological basis of the research was comparative and logical methods, methods of analysis and synthesis, as well as the method of generalization.

Results&Discussion. According to the Concept of the Development of Distance Education in Ukraine, modern distance education is an extensive system of knowledge transfer at a distance using various means and technologies, which helps students obtain the necessary information for use in practical activities [5]. Distance learning is a form of educational process organization and pedagogical technology, the basis of which is the controlled independent work of students and the wide use of modern information and communication technologies in education. The main goal of distance learning of students is to educate a personality who has the desire and ability to communicate, study and self-educate.

Note that at the current stage of education development in Ukraine, the problem of finding new, intensive forms of organization of the educational process is intensifying, which led to the integration of information technologies into education and formed a separate type of learning – distance learning.

According to the Regulation on distance learning, approved by the Order of the Ministry of Education and Science of Ukraine (2013); The Law of Ukraine «On Higher Education» (2014), the Law of Ukraine «On Education» (2017), the Regulation on the National Educational Electronic Platform (2018) in the Uman State Pedagogical University named after Pavel Tychyna, the Regulation on distance learning, which is a normative document regulates the organization of the distance learning process at the University.

Distance learning, according to the Regulation, is an individualized process of a person acquiring general and professional competences, organized by means of mediated interaction of remote participants of the educational process in a specialized environment that functions on the basis of modern psychological and pedagogical and information and communication technologies [6].

The purpose of distance learning is to provide higher educational institutions with educational services through the use of modern information and communication technologies in education in accordance with state standards of higher education; according to the programs of training citizens for admission to institutions of higher education, training foreign citizens and improving the qualifications of employees.

The tasks of distance learning at the University include ensuring equal opportunities for citizens in realizing their constitutional right to education, assignment and improvement of professional qualifications, regardless of gender, race, nationality, social and property status, type and nature of occupations, worldview beliefs, party affiliation, attitude to religion, creed, state of health, place of residence and taking into account their abilities.

Based on the Regulation on distance learning, terms and concepts are used in the following meanings:

– asynchronous mode involves interaction between subjects of distance learning, during which participants interact with each other with a time delay, using e-mail, forum, social networks, etc.;

– web resources of educational disciplines (programs), distance courses are presented as a systematic collection of information and educational and methodical tools necessary for mastering educational disciplines (programs) and accessible via the Internet (local network) using a web browser and/or other software means;

– distance learning web environment is defined as a systemically organized set of web resources of educational disciplines (programs), software for managing web resources, means of interaction between distance learning subjects and distance learning management;

– the distance form of education is interpreted as a form of organization of the educational process at the University, which ensures the implementation of distance education and provides for the possibility for graduates to receive documents of the state standard on obtaining the corresponding educational degree.

In the conditions of distance learning in the ZVO, the use of modern technologies is provided, such as:

– distance learning information and communication technologies –technologies for creating, storing, storing and accessing distance courses (electronic resources) of educational disciplines (programs), as well as ensuring the organization and support of the educational process using specialized software and information and communication means;

– psychological and pedagogical technologies of distance learning – a system of means, techniques, steps, the consistent implementation of which ensures the fulfillment of the tasks of education, education and personality development;

− distance learning technologies − a complex of educational technologies (in particular, psychological-pedagogical and information-communication) that provide an opportunity to implement the process of distance learning at the University.

According to the Regulation on distance learning, the synchronous mode, as the most appropriate, involves interaction between subjects of distance learning, during which all participants of the educational process are simultaneously in the web environment of distance learning (chat, audio, video conferences, social networks, etc.), that is, the synchronous format involves the cooperation of distance learning subjects in real time.

In turn, «subjects of distance learning» are understood by us as persons who study (student, trainee), and persons who provide the educational process in the conditions of distance learning (pedagogical and scientific-pedagogical workers, methodologists, etc.) [6].

Understanding the above, the quarantine conditions and the conditions of the state of war in which Ukraine is, prompt the improvement of the distance learning system, which is understood as a set of software for creating, saving, and accumulating distance courses, designed for the organization of the educational process and monitoring of learning via the Internet and /or local network, and also provides authorized access of distance learning subjects to training courses.

Distance learning can be implemented through:

− application of distance education as a separate form of education;

− the use of distance learning technologies to provide education in various forms: institutional (full-time − day, evening; part-time, distance; online); individual (external; family or home; pedagogical patronage; workplace or production); dual

In the conditions of distance learning, special attention should be paid to the peculiarities of the organization of the educational process in higher education institutions, which is carried out in the following forms: independent work; educational classes; practical training; control measures.

The main form of organization of the educational process in the conditions of distance learning is independent work, while the main types of training classes in such conditions are: lecture, seminar, practical classes, laboratory classes, consultations, etc.

Lectures, consultations, and seminars are held with students of higher education remotely in synchronous or asynchronous mode according to the curriculum and class schedule. Obtaining educational materials, communication between subjects of distance learning during educational classes organized remotely, can be provided through the provision of video, audio, graphic and text information in synchronous or asynchronous mode.

A practical lesson, which involves the student performing practical (control) works, can be conducted remotely in asynchronous mode. Individual practical tasks can be performed in synchronous mode, if this is provided by the work program of the academic discipline.

Laboratory classes should be organized face-to-face in specially equipped educational laboratories or remotely using virtual simulators and laboratories. As for

other types of training sessions (business games, debates, discussions, implementation of projects in groups, etc.), they can be conducted face-to-face or remotely in synchronous or asynchronous mode according to the work program of the academic discipline.

Control measures in the academic discipline include intermediate (thematic, modular), final and other controls of students' educational achievements. All control measures at the University are organized remotely or face-to-face using the capabilities of information and communication technologies, in particular video conference communication, provided authentication of the student is ensured.

The organization of the educational process at the Uman State Pedagogical University is carried out using distance learning technologies for methodical and didactic support of independent work, control measures, as well as during training sessions using the Moodle platform (Modular Object Oriented Distance Learning Environment) – a system of software products CLMS (Content Learning Management System), the distribution of which is freely distributed according to the principles of the Open Source license. With the help of this system via the Internet (dls.udpu.edu.ua), the student has the opportunity to familiarize himself with the educational material, which is presented in the form of various information resources (text, video, animation, presentation, electronic manual), complete the task and send it for verification , pass testing, etc. The instructor can independently create e-courses and conduct training, send messages to students, assign and check assignments, keep electronic grade logs, configure various course resources, and more. With the help of distance learning technologies and the Moodle platform, the University carries out internal monitoring of ensuring the quality of educational activities and the quality of higher education.

It is worth noting that access to the University's distance learning system resources is personalized. Participants of the educational process receive a login and password for entering the system after registering in it. Each SDN user has access only to those electronic training courses for which he is registered to participate in the educational process. SDN users are personally responsible for the confidentiality of the storage of logins and passwords. The administration and support of the Moodle system at the University is provided by the technical staff of the information and computing center and the distance learning center.

Scientific and methodological support for distance learning includes:

– methodical (theoretical and practical) recommendations for the development and use of pedagogical-psychological and information-communication technologies of distance learning;

– criteria, means and quality control systems of distance learning;

– meaningful, didactic and methodical content of web resources (distance courses) of the curriculum/educational program of the specialty.

Pedagogical, scientific-pedagogical workers and methodologists who participate in the organization of distance learning must systematically improve their qualifications for high-quality organization and sufficient mastery of distance learning technologies.

When organizing distance learning, the University has the appropriate hardware and software:

− hardware (personal computers, network equipment, servers, equipment for video conferencing, etc.) that ensure the development and use of web resources for educational purposes, management of the educational process and the necessary types of interaction between subjects of distance learning in synchronous and asynchronous modes;

− information and communication support with channel bandwidth to provide all subjects of distance learning round-the-clock access to web resources and web services and the implementation of the educational process in synchronous and asynchronous modes;

− software of general and special purpose (in particular for persons with special needs), which is licensed or built on software products with open codes.

The main areas of international cooperation in the field of distance learning for the University are:

− participation in projects and programs aimed at the entry of Ukraine's distance learning system into the world education system, taking into account national interests and achievements of domestic education, in particular, the creation of international virtual universities, which include educational institutions of different countries;

− conducting joint scientific research aimed at the development of distance learning;

− provision of services related to obtaining an education using distance learning technologies to foreign citizens, etc.

At the same time, considering the features of distance learning as an innovative form of professional training of a modern teacher, we focus on its advantages compared to traditional forms (full-time and part-time), such as: continuity of learning - the ability to learn at any time according to an individual schedule; accessibility – the openness of educational resources for the mass involvement of all segments of the population in the educational process; economy – the provision of quality education with minimal financial and energy costs; individualization and differentiation of training – creation and adjustment of distance courses taking into account the age and physiological characteristics of the user; innovativeness – the use of new information and communication means of learning to create a high-quality educational environment for the purpose of forming and developing skills not only in specialized fields, but also acquiring computer literacy; mobility – the opportunity to study in another direction in parallel, as well as without breaking away from professional activity.

In modern conditions, flexibility and a wide toolkit of distance education make it possible to use such technologies in the face-to-face form of education (checking tasks, monitoring the level of mastery of skills and abilities), in combination with the extramural form (on-line consultations, teleconferences), as well as as a separate type of training organization (web course, training). With the use of the latest tools, all

necessary educational resources (textbooks, manuals, didactic material, pedagogical software, etc.) are stored in a single accessible cloud storage.

However, the use of distance education has some disadvantages that must be eliminated, if possible, in one way or another: the incompetence of some teachers in the matter of organizing distance education with the use of new information and communication technologies; the difficulty of controlling the independence of tasks; the difficulty of motivating and controlling the timeliness of tasks due to the allocation of most of the educational material for independent processing; the difficulty of organizing joint activities for the purpose of communication and exchange of experience, etc.

With the distance form of education, certain communication limitations must also be taken into account: a certain isolation of the student in a virtual academic group; restrictions that prevent the development of group communication, group unity; technical means of group communication activity of the teacher and student create an artificial and inferior, in the traditional sense, communicative space; inability to accurately and clearly express your thoughts, especially in chats and short messages; difficulties in short formulating and succinctly arguing one's position during the educational process, especially in chats and video conferences.

Conclusions. The goal of implementing distance learning in higher education institutions during the period of quarantine measures and the war in Ukraine is the organization of a high-quality educational process «at a distance» with the use of the latest information and communication tools and open access to educational resources. It is this form of education that can quickly adapt to the requirements of the information society and qualitatively prepare the future teacher. In combination with traditional forms (under a mixed system of education), distance education in a higher education institution can provide a wide range of educational services both for applicants and students to acquire the necessary skills and abilities for future professional activities, and for teachers to improve their qualifications.

Author contributions. The authors contributed equally.

Disclosure statement. The authors do not have any conflict of interest.

References:

1. Activation of the educational process in modern higher education. Composition. L. A. Yakymova. Kyiv: State Enterprise «Personal Publishing House», 2010. 255 p.

2. Bystrova Yu. V. Innovative methods of education in higher education of Ukraine. *Law and innovative society*. 2015. No. 1(4). P. 27-28.

3. Bialik O.V., Dzyubenko I.A. Educational innovations in higher education: teaching. manual. Uman: Visavy, 2021. 219 p.

4. Innovations in higher education: problems, experience, prospects: monograph. P. Yu. Saukh [et al.]. Zhytomyr: Department of ZhDU named after I. Franka, 2011. P. 14-319.

5. The concept of distance education development in Ukraine. URL: http://uiite.kpi.ua/2019/06/03/1598/

6. Regulations on distance learning at Uman State Pedagogical University named after Pavel Tychyna (New edition) URL: https://udpu.edu.ua/documents/doc